

CLAIMS

1. A vehicle barrier system including a barrier movable between an open position to allow vehicle access therethrough and a closed position which prevents vehicle access therethrough, said barrier being attached to barrier supports at either end of said barrier, said barrier supports being secured to a slide plate which will slide after a predetermined force is applied thereto by vehicle impact with said barrier to absorb the impact energy of said vehicle.
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2. The vehicle barrier system as claimed in claim 1, wherein said slide plate is sufficiently long to have a part of said vehicle sitting thereon at impact.
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3. The vehicle barrier system as claimed in claim 1 or 2, wherein said movement of said slide plate is controllable.
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4. The vehicle barrier system as claimed in claim 3, wherein said movement is controllable by one or more of a group selected from a ballast attached directly or indirectly to said slide plate, at least one further slide plate attached to said slide plate, the extension of attachment means attached to said at least one further slide plate and/or said ballast, the extension of attachment means attached to said slide plate and a surface over which said slide plate moves, and the shearing of at least one rivet securing said slide plate to a surface on which said slide plate slides.
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5. The vehicle barrier system as claimed in claim any one of claims 1 to 3, wherein said movement is controllable by the shearing of a plurality of rivets securing said slide plate to at least one fixed surface on which it slides, said plurality of rivets protruding through at least one slot in said slide plate from said fixed surface.
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6. The vehicle barrier system of claim 5, wherein a pair of slots is provided and said slide plate rests on said at least one fixed surface which is formed by a pair of ground engaging beams aligned with respective slots.
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7. The vehicle barrier system of claim 5, wherein a pair of slots on opposing sides of said slide plate is provided and said slide plate rests on said at least one fixed surface.
8. The vehicle barrier system of any one of the preceding claims, wherein
5 a pair of upright beams is secured to the ground in front of respective barrier supports, said upright beams being secured to said pair of ground engaging beams at one end and pivotally and/or slidably linked to said barrier supports at the other end.
9. The vehicle barrier system of any one of claims 1 to 8, wherein said
10 barrier allows structural deformation to occur to absorb impact forces.
10. The vehicle barrier system of any one of the preceding claims, wherein said barrier can be raised into said open position and lowered into said closed position.
11. The vehicle barrier system of any one of claims 1 to 9, wherein said
15 barrier can be pivotally lowered into said open position and pivotally raised into said closed position.
12. The vehicle barrier system of any one of claims 1 to 9, wherein said barrier can be slid open into said open position and slide closed into said closed position.
- 20 13. The vehicle barrier system of any one of claims 1 to 9, wherein said barrier includes a first and second barrier pivotally attached at their opposing ends, said barriers can be pivotally swung from their opposing ends into said open position and pivotally swung closed into said closed position.
- 25 14. The vehicle barrier system of claim 5, wherein said at least one fixed surface is an anchor plate which is secured to the ground by affixing means.
15. The vehicle barrier system of claim 14, wherein said barrier forms part
30 of a ramp in its open position and is pivotally attached at either side to said slide plate to be raised from said slide plate to a substantial vertical position to its closed position.

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16. The vehicle barrier system of claim 15, wherein a pair of tension bars is connected between said anchor plate and said slide plate whereby, in use, said pair of tension bars will lengthen when said barrier is struck by said vehicle.
- 5 17. The vehicle barrier system of claim 15 or 16, wherein a further support is coupled at the rear of said barrier to further assist in preventing collapse of said barrier from vehicular impact when said barrier is in its substantial vertical position.
- 10 18. A vehicle barrier system including a barrier movable between an open position to allow vehicle access therethrough and a closed position which prevents vehicle access therethrough, said barrier being attached to barrier supports at either end of said barrier, said barrier supports being secured to the ground on a ground engaging plate(s), a pair of bridging slide plates on one side of each of said barrier supports attached at one end to a respective said barrier support and at the other end to said ground engaging plate(s), said slide plates joined by at least one rivet, said slide plates movable with respect to one another when said at least one rivet is sheared after a predetermined force is applied from vehicular impact with said barrier to absorb the impact energy of said vehicle.
- 15 20 19. The vehicle barrier system as claimed in claim 18, further including a tension member on the other side of said barrier support linking its respective ground engaging plate to said barrier support.
- 25 20. The vehicle barrier system as claimed in any one of claims 18 to 20, wherein said movement is controllable by the shearing of a plurality of rivets, said plurality of rivets protruding through at least one slot in one of said slide plates.